I CLAIMA.

Claims

- 1. Bristle for brushware or brushes, produced by cutting an extruded monofilament to length and being tapered towards their useful ends in a pointed manner and comprising at least two coextruded plastic components with a shaft (6) of a soft elastic plastic material and a core (5) of a harder flexible plastic material, wherein the core (5) projects past the shaft (6) at the useful end (2), thereby forming a tip (4), characterized in that the soft-elastic shaft (6) is surrounded by a jacket (7) of a plastic material which reinforces the shaft (6).
- 2. Bristle according to claim 1, characterized in that the shaft (6) consists of a rubber-elastic plastic material.
- 3. Bristle according to claim 1 or 2, characterized in that the shaft (6) consists of an elastomer.
- 4. Bristle according to any one of the claims 1 through 3, characterized in that the shaft (6) and/or the jacket (7) extend conically towards the tip (4) of the core (5).
- 5. Bristle according to any one of the claims \1 through 4, characterized in that the core (5) has a conical tip.
- 6. Bristle according to any one of the claims 1 through 5, characterized in that the core (5) and the shaft (6) can be axially displaced relative to one another.

- 7. Bristle according to any one of the claims 1 through 6, characterized in that the shaft (6) and the jacket (7) can be axially displaced relative to one another.
- 8. Bristle according to any one of the claims 1 through 7, characterized in that the core (6) is rounded at its tip (20).
- 9. Bristle according to any one of the claims 1 through 8, characterized in that the core (5) consists of a thermoplastic material, polyamide or polyester and the shaft (6) consists of a thermoplastic elastomer.
- 10. Bristle according to any one of the claims 1 through 9, characterized in that the jacket (7) consists of a thermoplastic material, polyamide or polyester.
- 11. Bristle according to claim or 10, characterized in that the thermoplastic material is polyamide, polyethylene, polypropylene or polyester.
- 12. Bristle according to any one of the claims 1 through 11, characterized in that the bristle (1) extends conically on a partial length of up to 2mm.
- 13. Bristle according to any one of the claims 1 through 12, characterized in that the bristle (1) extends conically on a partial length of between 0.1 and 1mm.

- 14. Bristle according to any one of the claims 1 through 12, characterized in that the diameter of the core (5) at the pointed end (4) is between 0.01 and 0.03mm.
- 15. Bristle according to any one of the claims 1 through 14, characterized in that at least the core (5) can be split once or several times in the region of its exposed end (4) and be spread beginning at its end.
- 16. Bristle according to any one of the claims 1 through 14, characterized in that at least the core (5) is split once or several times in the region of its exposed end (4) and at a separation thereform, wherein the split region bulges elastically when pressure is exerted on the end.
- 17. Bristle according to any one of the claims 1 through 16, characterized in that the core (27) consists of two or more thin monofilaments (25).
- 18. Bristle according to any one of the claims 1 through 17, characterized in that the cross-section of its material structure changes from the inside to the outside.
- 19. Bristle according to any one of the claims 1 through 18, characterized in that its core (5) has a material structure of high elasticity and abrasion resistance and its jacket (7) has a high bending strength.

- 20. Bristle according to any one of the claims 1 through 19, characterized in that it is produced through coextrusion of shaft (6), core (5) and optionally jacket (7).
- 21. Bristle according to any one of the claims 1 through 19, characterized in that it is produced through extrusion of the jacket (7) onto the shaft (6) with coextruded core (5).
- 22. Bristle according to any one of the claims 1 through 21, characterized in that it comprises abrasive means which are embedded at least in the region of the soft shaft (6).
- 23. Bristle according to any one of the claims 1 through 22, characterized in that at least the shaft (6) and the core (5) have different colors.
- 24. Method for producing bristles according to any one of the claims 1 through 23, characterized in that the bristle (1) or a monofilament forming same or a section of such a monofilament is conified through grinding by clamping it at a separation from the free end, supported with the core on a circulating grinding surface (19), and set at an inclination with respect to that circulating grinding surface (19) corresponding substantially to the cone angle.

- 25. Method according to claim 24, characterized in that the bristle, including core (6) and jacket (7), is supported on the grinding surface (19).
- 26. Method for producing bristles according to any one of the claims 1 through 6, characterized in that the core (5) and the shaft (6) are axially displaced relative to one another until part of the length of the core (5) projects past the shaft (16).
- 27. Method for producing a bristle according to any one of the claims 1 through 7, characterized in that the jacket (7) and the shaft (5) are axially displaced relative to one another until a cylindrical partial length of the shaft projects past the jacket.
- 28. Method according to any one of the claims 24 through 27 for producing bristles with stepped core (5) and shaft (6) and/or jacket (7), wherein part of the length of at least the shaft (6) and/or the jacket (7) are conical.
- 29. Brush, in particular tooth brush comprising a bristle support and a bristle stock mounted thereto, of individual bristles or bristles combined into bundles or groups, characterized in that the bristle stock at least partially comprises bristles (1) according to any one of the claims 1 through 23.

- 30. Brush according to claim 29, characterized in that the bristles (1) according to any one of the claims 1 through 23 are disposed only in defined regions of the bristle stock.
- 31. Brush, in particular tooth brush head for driven tooth brushes comprising a brush support and a brush stock mounted thereto which is made of individual bristles or of bristles combined into bundles or groups, characterized in that the bristle stock at least partially comprises bristles (1) according to any one of the claims 1 through 23.
- 32. Brush according to claim 31, characterized in that the bristles (1) according to any one of the claims 1 through 23 are only disposed in defined regions of the bristle stock.
- 33. Brush according to claim 29 or 30, characterized in that the bristles (1) according to any one of the claims 1 through 23 project past the other bristles of the bristle stock.

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